

*NOAA Climate and Global Change Program
Climate Prediction Program for the Americas (CPPA)*

Project Progress Report: 1 September 2007 – 31 May 2008 (Year 1)

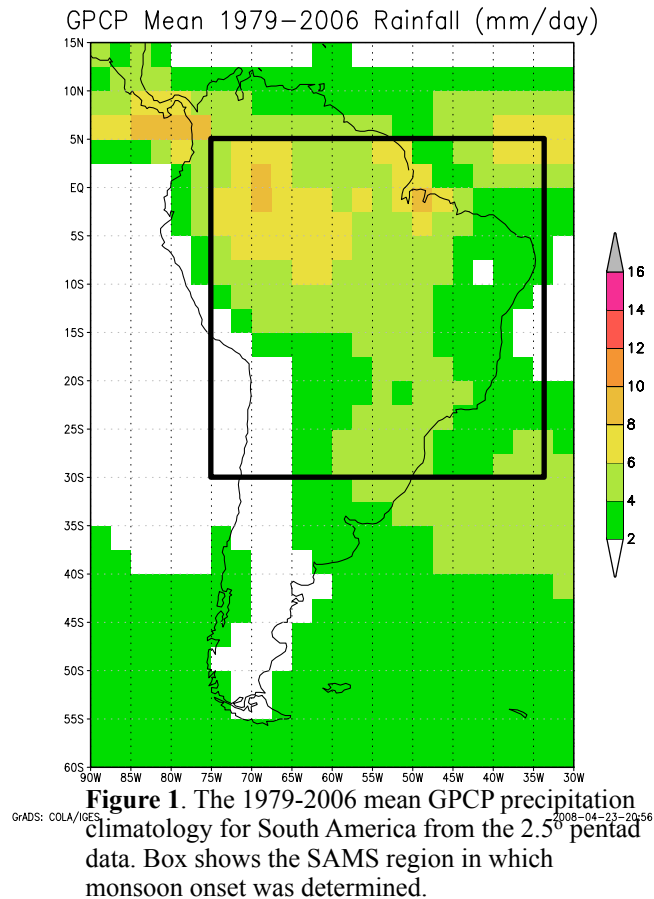
Project Title: “Onset of the South American Monsoon: Mechanisms and Predictability”

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Figures:



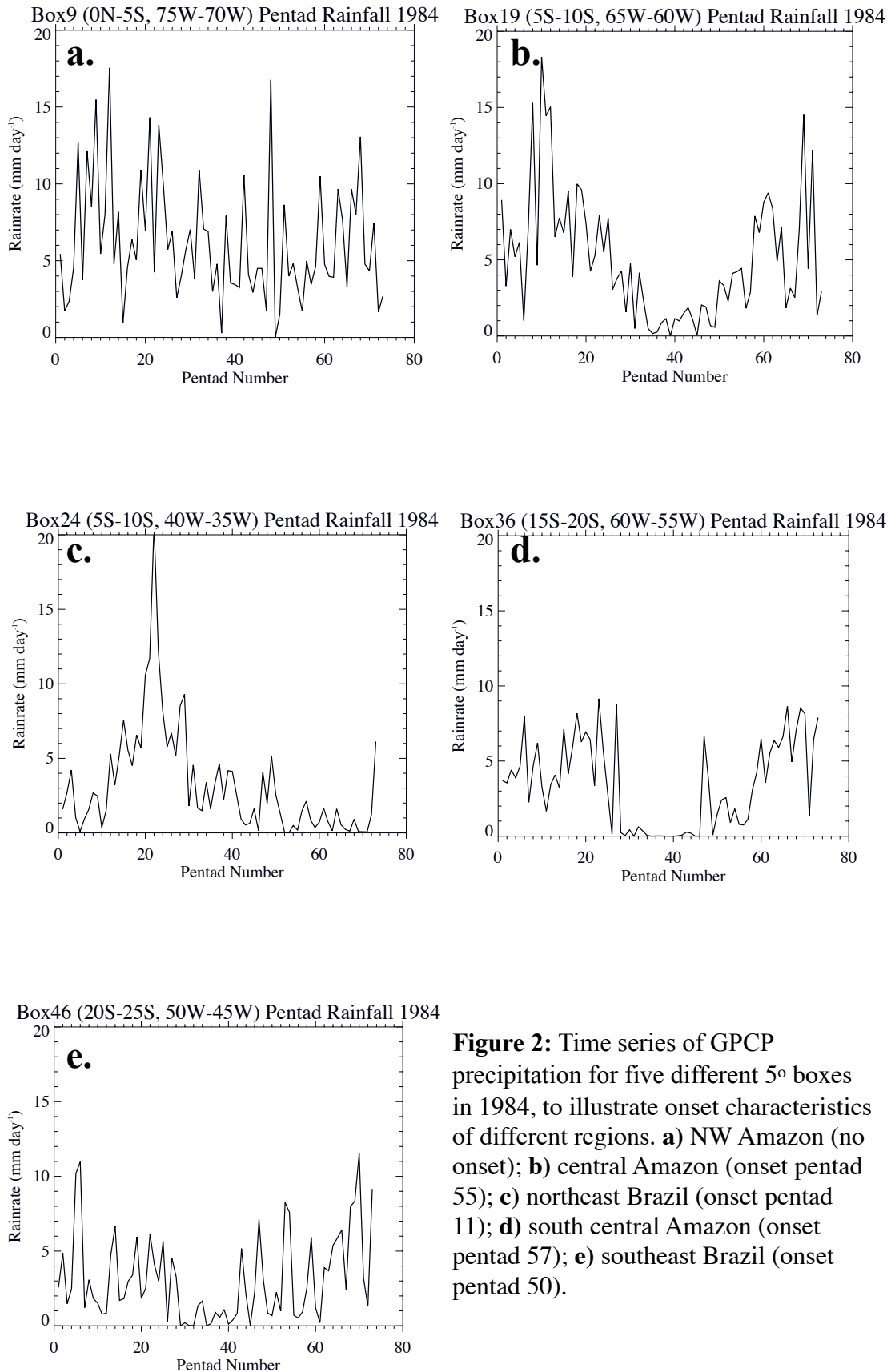


Figure 2: Time series of GPCP precipitation for five different 5° boxes in 1984, to illustrate onset characteristics of different regions. **a)** NW Amazon (no onset); **b)** central Amazon (onset pentad 55); **c)** northeast Brazil (onset pentad 11); **d)** south central Amazon (onset pentad 57); **e)** southeast Brazil (onset pentad 50).

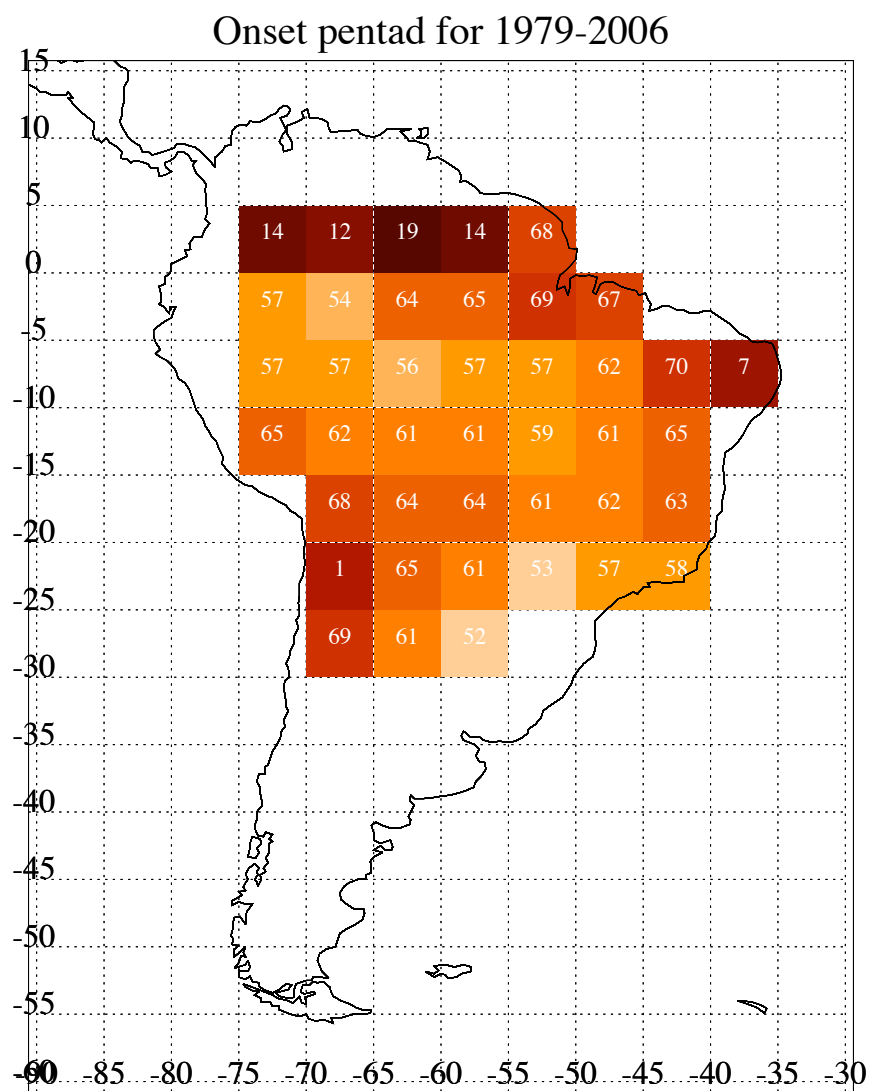


Figure 3: The 1979-2006 mean onset pentads for each 5° box in the SAMS region. Darker shading means later onset. Onset is defined starting in June of a given year.

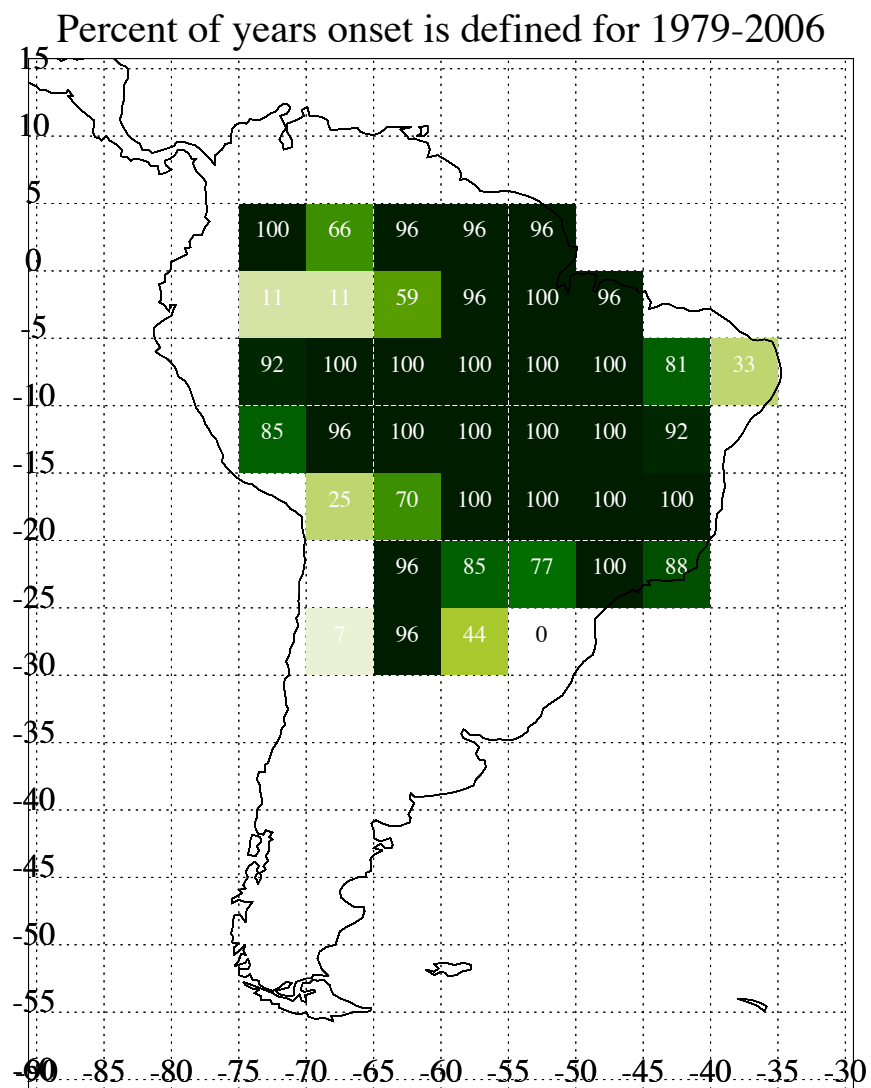


Figure 4: The percentage of years where onset occurs in the period 1979-2006 for each 5° box in the SAMS region. Darker shading means later onset.

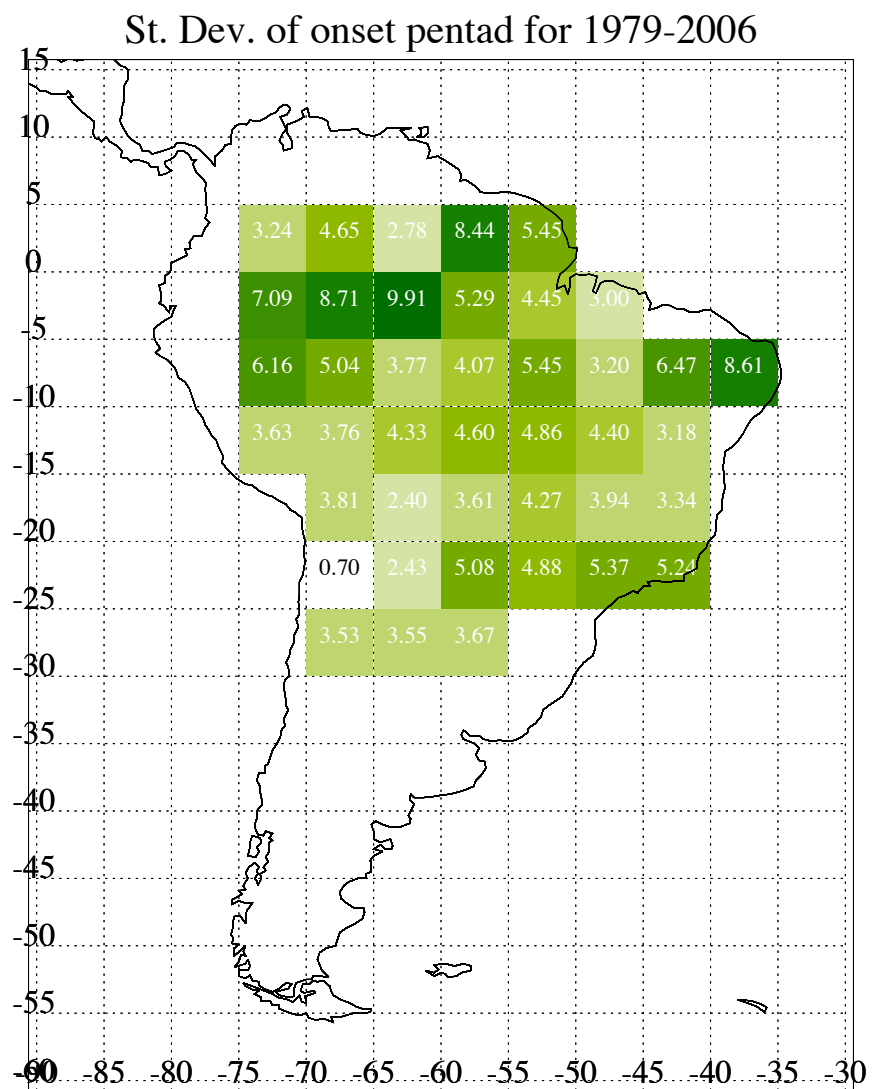


Figure 5: Standard deviation of onset pentad for each 5° box in the SAMS region, for years when onset occurs. Darker shading means larger range of onset pentad values between 1979-2006.

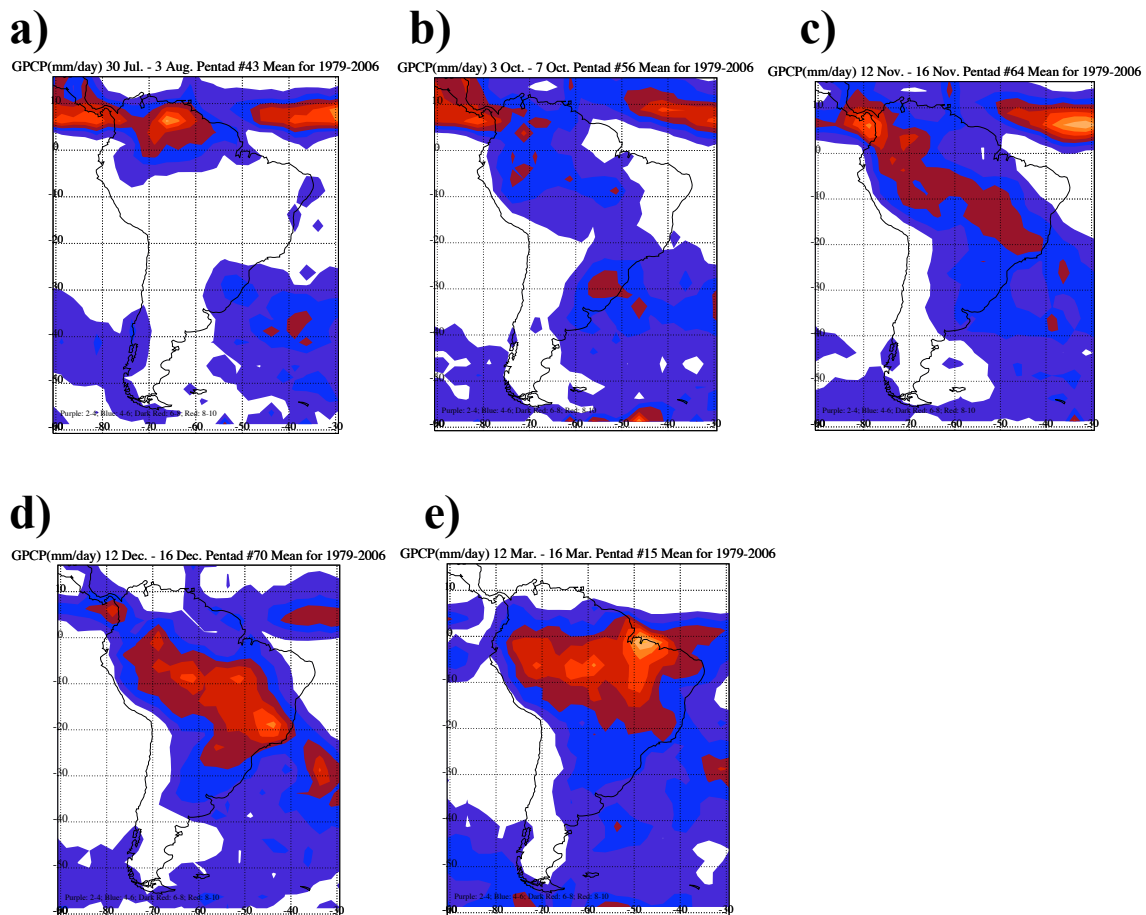
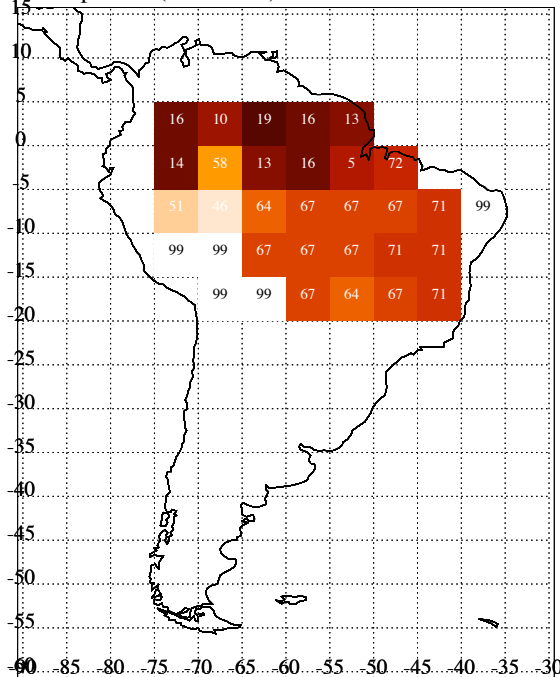


Figure 6: GPCP rain composite maps (mean of 1979-2006) at key pentads, illustrating the evolution of onset from a) early August (pentad 43); b) early October (pentad 56); c) mid-November (pentad 64); d) mid-December (pentad 70); and e) mid-March (pentad 15).

a)

Onset pentad (onethresh) for June 1982 - June 1983



b)

Onset pentad (onethresh) for June 2001 - June 2002

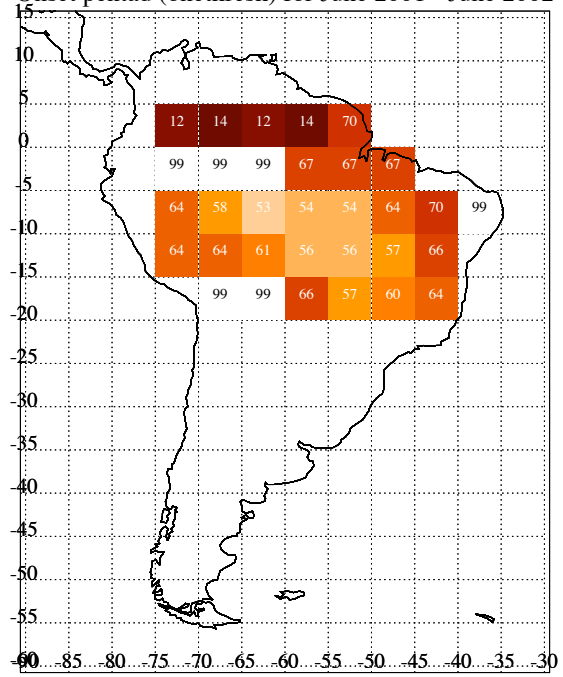


Figure 7: Onset pentads for a) the strong El Niño season of 1982-1983, and b) the ENSO-neutral season of 2001-2002. Darker shading means later onset. Pentad value of 99 means onset criteria were not met for that season.